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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,213	01/28/2004	Scott S. McGowen	023829-0255	7634

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EXAMINER
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SAYALA, CHHAYA D

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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10/14/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/765,213	<b>Applicant(s)</b> MCGOWEN ET AL.	
	<b>Examiner</b> C. SAYALA	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-59 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Status of Claims***

Claims 1-59 are pending; claims 57-59 were added and claims 1, 25, 27-56 have been amended.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4, 6-12, 16-22, 24-40, 43-59 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Freese (US Patent 3416928) taken in light of Mommer et al. ("A Guide to Field Pelleting Technology", Uniscope, Inc, 2002, pages 1-22).

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Freese teaches mixing urea prills, which are between 10 mesh and 30 mesh (col. 1, lines 60-70) with ruminant feed formulations to form a free-flowing non-segregated mixture that is pelleted by conventional means. The feed supplements are shown at col. 3, example 1. Note col. 2, line 14 + which teaches the importance of the size of the urea prills. Urea amounts are given as 1-12 wt % (col. 2, line 63).

Claims 6, 8 etc recite a fertilizer grade urea. The patent does not specifically disclose the grade of the urea, but the burden is being shifted to applicant to show that:

- 1) the urea of the reference is only food grade and cannot be used as a fertilizer
- 2) that a criticality exists in using a fertilizer grade urea over a food grade urea, failing which, it appears that one is obvious over the other.

As for the claims such as 33-35 that recite physical characteristics of sphericity and Waddell roundness, the Office is not equipped to prepare prior art products and compare them with the claimed product and since applicant has chosen to describe the product by using such physical characteristics, the burden is being shifted to applicant to show that the product patentably differs by virtue of such characteristics.

Mommer has been used here only to establish that applicant's so-called 'crushing' is known and old. The reference uses the term "crumbling" and also shows as part of pelleting technology, the breaking down or grinding down to a pre-selected size before pelleting based on the nature of the product being pelleted. See pages 3, 6, 11-12 and 14.

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2. Claims 1-4, 6-14, 16-22, 24-51, 53-59 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wilding et al. (US Patent 3600188) taken in light of Mommer et al. ("A Guide to Field Pelleting Technology", Uniscope, Inc, 2002, pages 1-22).

Example 1 of Wilding et al. teaches taking "finely ground" urea and pelleting it with proteinaceous soybean grits. Protein materials are shown at lines 10 +, col. 3, with amounts of urea as 25-65% (col. 3, line 25). Note example 8, which teaches mixing hay, soy bean hulls and urea. If the product is "finely ground", then it inherently contains the particle sizes claimed herein. Alternatively, if the product is being "finely ground", then to grind it to a size that is required for being pelleted with urea, would have been obvious to one of ordinary skill in the art of pelleting such materials.

Claims 6, 8 etc recite a fertilizer grade urea. The patent does not specifically disclose the grade of the urea, but the burden is being shifted to applicant to show that:

- 3) the urea of the reference is only food grade and cannot be used as a fertilizer
- 4) that a criticality exists in using a fertilizer grade urea over a food grade urea, failing which, it appears that one is obvious over the other.

As for the claims such as 33-35 that recite physical characteristics of sphericity and Waddell roundness, the Office is not equipped to prepare prior art products and compare them with the claimed product and since applicant has chosen to describe the product by using such physical characteristics, the burden is being shifted to applicant to show that the product patentably differs by virtue of such characteristics.

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Mommer has been used here only to establish that applicant's so-called 'crushing' is known and old. The reference uses the term "crumbling" and also shows as part of pelleting technology, the breaking down or grinding down to a pre-selected size before pelleting based on the nature of the product being pelleted. See pages 3, 6, 11-12 and 14.

3. Claims 1-4, 6-14, 16-22, 24-59 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 02/06186 taken in light of Mommer et al. ("A Guide to Field Pelleting Technology", Uniscope, Inc, 2002, pages 1-22).

WO 02/06186 describes crushing waste material such as animal waste, grain by-products, slaughterhouse waste, which would include litter, hay and protein, and mixing urea, wherein the urea is up to about 80%. The urea is said to be in the form of prills of different grades or it is powdery (page 3, last 2 paragraphs). The patent teaches that the organic material is crushed to a particle size of less than 2 or 1 mm depending on the desired product size. The urea size is given as powdery or prills but nothing more, and therefore, they must inherently be of the particle size as claimed herein. At page 4, the patent teaches that the fertilizer material is granulated to a size between 2mm to 5mm, which overlaps with "about 2mm". Alternatively, if the organic matter is crushed to the same claimed size as those for urea, then to crush the urea to the size disclosed

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pertaining to the organic matter would have been obvious, since the patent teaches that the organic material is crushed to a particle size depending on the desired product size.

Claims 6, 8 etc recite a fertilizer grade urea. The patent does not specifically disclose the grade of the urea, but the burden is being shifted to applicant to show that:

- 5) the urea of the reference is only food grade and cannot be used as a fertilizer
- 6) that a criticality exists in using a fertilizer grade urea over a food grade urea, failing which, it appears that one is obvious over the other.

As for the claims such as 33-35 that recite physical characteristics of sphericity and Waddell roundness, the Office is not equipped to prepare prior art products and compare them with the claimed product and since applicant has chosen to describe the product by using such physical characteristics, the burden is being shifted to applicant to show that the product patentably differs by virtue of such characteristics.

Mommer has been used here only to establish that applicant's so-called 'crushing' is known and old. The reference uses the term "crumbling" and also shows as part of pelleting technology, the breaking down or grinding down to a pre-selected size before pelleting based on the nature of the product being pelleted. See pages 3, 6, 11-12 and 14.

4. Claims 5, 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freese or Wilding et al. or WO '186 taken in light of Mommer et al. ("A Guide to Field Pelleting Technology", Uniscope, Inc, 2002, pages 1-22) in view of Dancy and Ray, Jr. et al. (US Patent 5340598).

Freese or Wilding et al. or WO '186 do not teach the use of a roller mill but Mommer shows this to be known and old. Dancy teaches a variety of mills for comminuting ('crushing'?) compounds (col. 4, line 27+), and Hay, Jr. et al. teach (col. 14, lines 40-43) that grinding with rolling mills ensures smoothness; then it would have been obvious to one of ordinary skill in the art to select the desired mill from those customarily used in the art depending on its function as shown, such selection being within the ambit of the artisan.

### ***Response to Arguments***

Applicant's arguments filed 7/8/2008 have been fully considered but they are not persuasive.

With regard to Freese, applicant states that Freese prepares pelleted urea with urea prills from 12 to 30 mesh in size. Freese, applicant states does not crush the urea. Applicant also points to Freese stating that urea pellets larger than 12 mesh is difficult to work with in the pelleting process, while urea less than 30 mesh is difficult to work with because urea is transformed to liquid under pelleting conditions. The reference therefore uses urea in sizes between 12 and 30 mesh. Applicant's claimed size: (claim 1) between about 40 mesh and about 10 mesh (converted from mm). Therefore, no difference is seen, in the face of the common pelleting practice of crumbling or grinding down to the required size before actually pelleting urea. See Mommer et al. Applicant points to Example 1 of the reference stating that the reference uses prilled urea to form pellets. The examples in the instant specification also use prilled urea and crushes it



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down to the same size that has been used by the reference. While crushing may have been necessary in the instant specification, the artisan has in front of him established techniques for pelleting technology which includes using the right size/grind. The reference, on the other hand begins with prills of the same size as recited in the claims and obviously does not need grinding/crushing and therefore, because the claims include a step routinely practiced in the art as shown by Mommer, it is not clear how this established patentability of the claims.

With regard to Wilding, applicant has forwarded the same argument: that the reference uses “finely ground urea” but does not crush it. It is not clear for the record if “finely ground area” overlaps with the sizes claimed i.e. from about 0.4 to about 2.0 millimeters. Applicant’s traversal does not for the record, establish that there is no overlap between the size of the urea in the reference and those in the claims.

On page 12, applicant states that since the claims recite “crushed” that the references be withdrawn. Since pelleting technology is not new and the artisan knows that if the size required for pelleting is not present, the material to be pelleted is always comminuted, then crushing/crumbling/grinding are process steps that are practiced and such is known and old in the art. See Mommer et al.

With respect to the WO patent, the size of the urea overlaps as well and even if it did not, it would be within the practice of pelleting technology to crumble it to the required size.

At page 14, applicant has pointed out that the references used to *only* show roller mill use for crushing compounds or for ensuring smoothness, are not pertinent because

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they do not pertain to the same area of endeavour. In this respect, while it is recognized that the patents pertain to fertilizer art or to the baking technology, this fact does not forestall an obviousness conclusion. As the Supreme Court has recently explained, "[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one" *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740, 82 USPQ2d 1385, 1395 (Fed. Cir. 2007).

Furthermore, it should be recognized that these references have been used here to rely on one fact and one fact only, that roller mill use to provide crushing of compounds and to ensure smoothness was known and to provide such properties one of ordinary skill in the art would know to incorporate roller mills in the process for grinding/crumbling urea.

The following references are equally pertinent:

Baskin teaches particulate urea is sold as prills in the same size as claimed. See col. 2, lines 28-35. Raynal teaches urea of feed grade is generally of powdery nature (col. 1, lines 50-52).

Barham et al. at col. 11, lines 10+ teach grinding down feed grade urea to 450 microns, which is in the claimed range, showing that grinding down urea to the same size as claimed herein was already known in the art, especially when the urea was mixed with grain.

Watkins shows grinding prills of urea or large sizes of urea to blend them with micronutrients or silage or seed and to granulate the blend. Note the size that all the

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materials are ground down to 100 to 325 mesh, that coincides with the claimed particle size. See col. 6, lines 12-24, col. 5, lines 10-11.

Such prior art references render obvious the particle size as claimed.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Sayala whose telephone number is (571) 272-1405. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/C. SAYALA/**

**Primary Examiner, Art Unit 1794**